AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions and listings of claims in this application.

LISTING OF CLAIMS:

1. (Previously Presented) An image processing apparatus comprising:

a detecting unit that detects all pieces of additional information that are embedded in image data;

a storage unit that stores the detected pieces of additional information in association with location information thereof;

an analyzing unit that analyzes the detected pieces of additional information and judges whether any of the detected pieces of additional information includes predetermined information that is updateable; and

an embedding unit that

(1) updates, when a judgment result of the analyzing unit is affirmative, the predetermined information included in the piece of additional information, and embeds the piece of additional information including the updated predetermined information into the image data at a location where the piece of additional information is originally embedded, by referring to the stored location information, and

(2) embeds, when the judgment result of the analyzing unit is negative, a new piece of additional information including updated information into the image data at a location that does not overlap locations where the detected pieces of

additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information.

2. (Canceled)

3. (Original) The image processing apparatus according to Claim 1, wherein when the analyzing unit analyzes the detected pieces of additional information, the analyzing unit employs a predetermined embedding format used by the embedding unit.

4. (Original) The image processing apparatus according to Claim 1, further comprising,

a warning unit that issues, when the analyzing unit finds that any of the detected pieces of additional information is unanalyzable, a warning to the effect that the piece of additional information is unanalyzable.

5. (Original) The image processing unit according to Claim 1,

wherein when the analyzing unit finds that any of the detected pieces of additional information is unanalyzable, the analyzing unit judges that the piece of additional information does not include the predetermined information.

6. (Original) The image processing apparatus according to Claim 1, wherein the predetermined information includes information about a date when the image data is processed.

7. (Previously Presented) An image forming apparatus equipped with an image processing apparatus that processes inputted first image data so as to output second image data, the image forming apparatus forming an image according to the second image data,

the image processing apparatus comprising:

a detecting unit that detects all pieces of additional information that are embedded in the first image data;

a storage unit that stores the detected pieces of additional information in association with location information thereof;

an analyzing unit that analyzes the detected pieces of additional information and judges whether any of the detected pieces of additional information includes predetermined information that is updateable; and

an embedding unit that

(1) updates, when a judgment result of the analyzing unit is affirmative, the predetermined information included in the piece of additional information, and embeds the piece of additional information including the updated predetermined information into the first image data at a location where the piece of additional information is originally embedded, by referring to the stored location information, and

(2) embeds, when the judgment result of the analyzing unit is negative, a new piece of additional information including updated information into the first image data at a location that does not overlap locations where the detected pieces of

additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information,

wherein the first image data embedded with the updated predetermined information and/or the new piece of additional information is outputted as the second image data.

8. (Canceled)

9. (Original) The image forming apparatus according to Claim 7,

wherein when the analyzing unit analyzes the detected pieces of additional information, the analyzing unit employs a predetermined embedding format used by the embedding unit.

10. (Original) The image forming apparatus according to Claim 7,

wherein the image processing apparatus further comprises,

a warning unit that issues, when the analyzing unit finds that any of the detected pieces of additional information is unanalyzable, a warning to the effect that the piece of additional information is unanalyzable.

11. (Original) The image forming apparatus according to Claim 7,

wherein when the analyzing unit finds that any of the detected pieces of additional information is unanalyzable, the analyzing unit judges that the piece of additional information does not include the predetermined information.

12. (Original) The image forming apparatus according to Claim 7,

wherein the predetermined information includes information about a date when the image data is processed.

13. (Previously Presented) A method for embedding additional information in image data comprising:

a first step of detecting all pieces of additional information that are embedded in the image data;

a second step of storing the detected pieces of additional information in association with location information thereof;

a third step of analyzing the detected pieces of additional information and judging whether any of the detected pieces of additional information includes predetermined information that is updateable;

a fourth step of updating, when a judgment result in the third step is affirmative, the predetermined information included in the piece of additional information, and embedding the piece of additional information including the updated predetermined information into the image data at a location where the piece of additional information is originally embedded, by referring to the stored location information, and

a fifth step of embedding, when the judgment result in the third step is negative, a new piece of additional information including updated information into the image data at a location that does not overlap locations where the detected pieces of additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information.

14. (Canceled)

15. (Previously Presented) The method for embedding additional information in image data according to Claim 13,

wherein when the detected pieces of additional information are analyzed in the third step, a predetermined embedding format used for embedding the piece of additional information in the fourth step and the new piece of additional information in the fifth step is employed.

16. (Previously Presented) The method for embedding additional information in image data according to Claim 13, further comprising,

a warning step of issuing, when any of the detected pieces of additional information is judged to be unanalyzable in the third step, a warning to the effect that the piece of additional information is unanalyzable.

17. (Previously Presented) The method for embedding additional information in image data, according to Claim 13,

wherein when any of the detected pieces of additional information is judged to be unanalyzable in the third step, the piece of additional information is judged not to include the predetermined information.

18. (Original) The method for embedding additional information in image data according to Claim 13,

wherein the predetermined information includes information about a date when the image data is processed.

19. (Previously Presented) The method for embedding additional information in image data according to Claim 13, further comprising,

a step of forming an image according to the image data that includes one of (a) the updated predetermined information embedded in the fourth step and (b) the new piece of additional information embedded in the fifth step.

20. (Previously Presented) A computer-readable medium containing a program that is executed by a computer, the program making the computer function as the following:

a detecting means for detecting all pieces of additional information that are embedded in image data;

a storing means for storing the detected pieces of additional information in association with location information thereof;

an analyzing means for analyzing the detected pieces of additional information and judging whether any of the detected pieces of additional information includes predetermined information that is updateable; and

an embedding means for

(1) updating, when a judgment result of the analyzing means is affirmative, the predetermined information included in the piece of additional information, and embedding the piece of additional information including the updated predetermined information into the image data at a location where the piece of

additional information is originally embedded, by referring to the stored location information, and

(2) embedding, when the judgment result of the analyzing means is negative, a new piece of additional information including updated information into the image data at a location that does not overlap locations where the detected pieces of additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information.

21. (Canceled)

22. (Original) The program according to Claim 20,

wherein when the analyzing means analyzes the detected pieces of additional information, the analyzing means employs a predetermined embedding format used by the embedding means.

23. (Original) The program according to Claim 20, making the computer further function as the following,

a warning means for issuing, when the analyzing means finds that any of the detected pieces of additional information is unanalyzable, a warning to the effect that the piece of additional information is unanalyzable.

24. (Original) The program according to Claim 20,

wherein when the analyzing means finds that any of the detected pieces of additional information is unanalyzable, the analyzing means judges that the piece of additional information does not include the predetermined information.

25. (Original) The program according to Claim 20,

wherein the predetermined information includes information about a date when the image data is processed.

26. (Previously Presented) An image processing apparatus comprising:

a detecting unit that detects additional information that is embedded in image data;

a storage unit that stores the detected additional information in association with location information thereof; and

an embedding unit that embeds new additional information in the image data at a location that does not overlap a location where the detected additional information is embedded, by referring to the stored location information.

27. (Previously Presented) A method for embedding additional information in image data, comprising:

a first step of detecting additional information that is embedded in image data;

a second step of storing the detected additional information in association with location information thereof; and

a third step of embedding new additional information into the image data at a location that does not overlap a location where the detected additional information is embedded, by referring to the stored location information.

28. (Previously Presented) A computer-readable medium containing a program that is executed by a computer, the program making the computer function as the following:

a detecting means for detecting additional information that is embedded in image data;

a storage means for storing the detected additional information in association with location information thereof; and

an embedding means for embedding new additional information into the image data at a location that does not overlap a location where the detected additional information is embedded, by referring to the stored location information.

29. (New) An image processing apparatus comprising:

a detecting unit that detects all pieces of additional information that are embedded in image data;

a storage unit that stores the detected pieces of additional information, the storage unit also stores location information indicating the location of where the detected pieces of additional information are embedded within the image data;

an analyzing unit that analyzes the detected pieces of additional information and judges whether any of the detected pieces of additional information includes predetermined information that is updateable; and

an embedding unit that

(1) updates, when a judgment result of the analyzing unit is affirmative, the predetermined information included in the piece of additional information, and embeds the piece of additional information including the updated predetermined information into the image data at the location where the piece of additional information is originally embedded, by referring to the stored location information, and

(2) embeds, when the judgment result of the analyzing unit is negative, a new piece of additional information including updated information into the image data at a location that does not overlap locations where the detected pieces of additional information are embedded, by referring to the stored location information, the updated information being equivalent to the predetermined information.